

# **Innovation Policy for 2011 – 2013 in the authority of the Ministry of Economy of the Slovak Republic**

## **Introduction**

Worldwide, innovation is considered to be one of the ways to accelerate the transition from a post-crisis economy to a stronger, sustainable one. Although it does not resolve all the global problems, it provides a basis for new industries, businesses and jobs. Innovation is the key to improving competitiveness, diversifying economic activities and moving towards activities with a higher added value. It has penetrated all of our activities. It affects not only life today, but also future opportunities and living conditions. There are several definitions of innovation, such as:

In Slovakia, innovation is defined in Act No. 172/2005 Coll. on the organisation of state support to research and development and on the amendment of Act No. 575/2001 Coll. on the organisation of government activities and on the organisation of central state administration as follows:

- a) a new or improved product or service that is marketable and based on the results of research and development or business activity;
- b) a new or improved production procedure or distribution method, including major changes to technology, equipment or software;
- c) a new method of organisation in the business practice of an enterprise, organisation of the workplace or external relations;
- d) transfer of scientific and technological knowledge into practice;
- e) purchase of aggregate experience (know-how) in production technologies and commerce, acquisition and leasing of rights under license agreements;
- f) introduction of modern methods in pre-production stages and in work organisation;
- g) improvement of inspection and testing methods in the manufacturing process and in services;
- h) improvement of work quality and safety at work;
- i) reduction of adverse environmental impacts;
- j) improved efficiency in the utilisation of natural resources and energy.

The present decrease of public investments in education and knowledge infrastructure of science and research will impact significantly on future innovation growth. In the short term, a reduction of expenditure in these areas reflects positively in the fiscal results; in the long term, it has a negative impact on the growth and competitiveness of the economy as such. An increase of expenditure in these fields, on the other hand, will ensure a sufficient number of jobs in new innovative businesses in the future. The key to success is a correct combination of public and private financing and the creation of conditions for the establishment and growth of innovative businesses. In the present day, providing local support to innovation in a certain segment is no longer enough – innovation must be supported across the board at all levels.

Globalisation makes the world smaller on the one hand, and it expands the market and increases the number of strong competitors on the other. Supporting the innovative activities of businesses and their engagement (particularly in international innovation cooperation projects) will lay the groundwork not only for their increasing competitiveness and economic

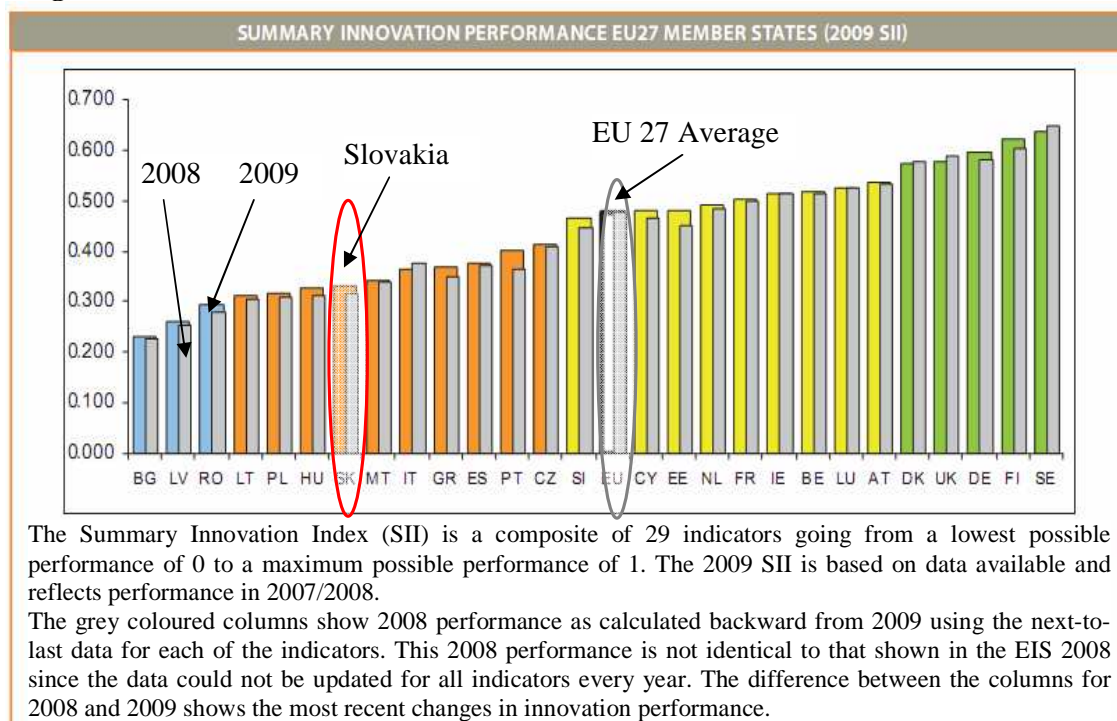
growth, but also for raising the living standards of the population. Support to innovation activities in businesses, especially in SMEs, shows to be one of the elementary tools for ensuring Slovakia's development.

Today more than ever, economic growth and progress requires the promotion of innovation and the development of proper tools to that end. Support must target the areas of education, professional training and the employment policy. On the other hand, it is necessary to support businesses in their independent innovation activity and to establish links between the sectors of business and science. Studies show that the achievement of the goals set out in the Europe 2020 strategy requires increasing R&D investment to 3 percent of GDP. By 2025, this could lead to the creation of 3.7 million new jobs and an annual GDP increase of EUR 795 billion. Simultaneously, at least one million researchers will be needed.

According to the European Innovation Scoreboard (EIS) 2009, Slovakia has internationally ranked among countries with the lowest innovation performance, standing at only 66% of the EU average. We have ranked as low as 21<sup>st</sup> among the EU27 in terms of innovation performance, and belong to the group of the so-called moderate innovators (diagram 1). Falling behind has several major causes – among other things, it is due to low public and private expenditure in research and development. Average expenditure in the EU27 stands at 1.82% of GDP, whereas in Slovakia it is only 0.48% of GDP, with public funds accounting for 55% of the total expenditure in science and research (Annex No. 2).

The government deems this fact to be mostly the result of a poor research base without specific objectives, the lack of large enterprises investing in research, ineffective support from the public sector, poor motivation of researchers, etc.

**Diagram 1 – Innovation Performance in 2009**



Source: European Innovation Scoreboard (EIS) 2009

The basic documents with the strategic objective of making innovation one of the main instruments in developing the knowledge economy, ensuring high economic growth of the Slovak Republic and catching up with the most advanced EU economies include the *“Innovation Strategy of the Slovak Republic until 2013”* approved by Slovak government resolution No. 265/2007 on 14 March 2007 and the *“Innovation Policy of the Slovak Republic for 2008 – 2010”* approved by Slovak government resolution No. 128/2008 on 27 February 2008.

In terms of content, the Innovation Policy for 2011 – 2013 follows up on the *“Manifesto of the Government of the Slovak Republic for the period of 2010 – 2014”* of August 2010, where the Slovak government has set the following goals in relation to innovation:

The Government will cooperate with the business sector in a review of the support and incentives for innovation in companies and strengthen the support of cooperation between universities, research institutes and companies using EU best practices, including the implementation of indirect supporting instruments for innovations.

The Government will place an emphasis on the connection between the issue of innovation and foreign direct investment in order to achieve sustainable growth for the Slovak economy.

The Government will clearly define sector competencies in research and development and innovations in order to increase innovation activities in the business sector and the coordination of state authorities providing support.

The Government will closely and systematically monitor the efficiency of public funds invested in research, development and innovations.

Taking into consideration the document entitled *“EUROPE 2020 - A European strategy for smart, sustainable and inclusive growth”* putting forward three mutually reinforcing priorities, the achievement of which aims to improve the citizens’ quality of life and living standards:

- 1) developing an economy based on knowledge and innovation;
- 2) promoting a more resource efficient, greener and more competitive economy;
- 3) fostering a high-employment economy delivering social and territorial cohesion,

the Slovak government considers it the most important economic policy objective to establish conditions for improving the quality of life and the living standards of its citizens by restoring the growth of the national economy and competitiveness through Slovakia’s improved innovation performance.

The Innovation Policy reflects the OECD recommendations listed in the Overview of the Economic Survey of the Slovak Republic of November 2010, in particular from the long-term structural viewpoint, and focuses on the issue of green growth, which is the main OECD strategy in the member countries and covers, inter alia, innovation (eco-innovation), the business environment and education. Eco-innovation is key in the long term. In the course of structural reforms, it is necessary to improve the innovation framework, including the rules for the provision of support to R&D and innovation. Supporting the business environment is necessary in order to provide access to capital and labour market mobility. Promoting the knowledge economy contributes to human capital building.

With that in mind, it is necessary to consider the fact that the industry, which is the backbone of the Slovak economy, faces a challenge ensuing from the approved Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions, the implementation of which will require substantial investments in production sustainability. In this case, innovation represents an opportunity to ensure the greatest possible efficiency of return on investment, with a view to getting the maximum added value from the material and energy used. The measures proposed below constitute the basic prerequisite for innovation to help promote the sustainability of Slovak industrial production.

In the context of innovation, the greatest challenge currently facing Slovakia and the EU as a whole is the inability to fully harness and share the research and development results, and subsequently to reflect them in economic and social values. The gap between research results and their practical application remains wide.

If Slovakia is to take the right course in the future period, it will be necessary to gradually address the issues concerning the low degree of investment in science, research and innovation compared to advanced EU members in order to reverse the year-on-year decline of private investments in research activities, to remove the disproportions from the past, when innovation development was mainly supported from the EU structural funds or international cooperation programmes, to improve cooperation between knowledge providers and beneficiaries across all industries, and for the public institutions to establish the conditions for providing effective support to selected business entities engaged in industrial research and development.

The primary objective of the Innovation Policy is to set up support mechanisms for the creation and development of innovation structures, innovation businesses, partnership and cooperation among businesses, universities and research institutes in the fields of research, development and innovation, and the establishment of conditions for improving Slovakia's competitiveness. The Innovation Policy for 2011 – 2013 in the authority of the Ministry of Economy of the Slovak Republic (MoE) was drawn up in accordance with Act No. 403/2010 Coll. amending Act No. 575/2001 Coll. on the organisation of government activities and on the organisation of central state administration as amended, and on the amendment of certain acts. The Innovation Policy was prepared so as to fit the EU policy framework, and simultaneously to represent a specific programme pursuing the national interests of the Slovak Republic.

### **Measures of the Innovation Policy for 2011 – 2013 in the authority of the Ministry of Economy of the Slovak Republic**

The individual Innovation Policy measures are aggregated along the priorities set out in the Innovation Strategy of the Slovak Republic for 2007–2013.

<b>Priority No. 1</b>	<b>High-quality infrastructure and an efficient system for innovation development</b>
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<b>Measure No. 1: Support to innovative industrial cluster organisations</b>
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The purpose of the measure is to improve industrial competitiveness through support to selected activities of industrial cluster organisations, with a view to promoting joint industrial activities in selected areas.

The measure will support selected cluster activities which contribute to increasing the competitiveness of the innovative cluster organisations' member companies. It will focus on actual well-established cluster organisations that have been carrying out activities for the benefit of their members in the past.

While facilitating the development of clusters, the creation of a supporting development instrument will mainly contribute to increasing the innovation capacity of the companies that are members of the cluster organisations. The measure will thus indirectly stimulate the development of small and medium-sized enterprises, which are the ones most vulnerable in the long-term – also due to their lack of innovation capabilities.

The instrument will also indirectly stimulate the establishment of new cluster organisations, thus stimulating cooperation in diverse industries or regions.

This measure will favour cluster organisations which focus on high-tech, those which operate in less developed regions, and internationally recognized cluster organisations.

**Task No. 1: To draw up the rules of support**

Deadline: 30 September 2011

Competent body: The Ministry of Economy of the Slovak Republic (Slovak Innovation and Energy Agency)

Cooperation: regional authorities (higher territorial units)

**Task No. 2: Publication of a call for the submission of support applications**

Deadline: by 31 December 2011

Competent body: MoE (SIEA)

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 1.3: Creating high-quality legislation for the development, support and evaluation of innovations

Measure 3.2.: Support of common services for entrepreneurs

Estimated amount of funds to be spent on this measure (2011–2013): EUR 4.0 million

**Measure No. 2: Promotion of innovation and building of innovation awareness across the society**

The objective of this measure is to enhance the image of Slovakia in the innovation area and to draft a comprehensive nation-wide promotion and communication model with a view to raising the awareness of innovation across the society.

The measure would serve to map all relevant activities implemented by the state and public administration in the field of innovation and to identify new activities with the potential of complementing measures that are already active. The resulting communication model would thus unite already implemented activities and propose new ones, in order to develop an optimum model with synergic informing effect.

**Task No. 1: To map relevant activities, identification of complementary activities and development of an optimised joint promotion model**

Deadline: 31 December 2011

Competent body: MoE (SIEA)

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 2.1: Support to communication tools aimed at the promotion of innovativeness

Estimated amount of funds to be spent on this measure (2011–2013): EUR 0.15 million

**Measure No 3: Competition “Innovative Action of the Year”**

The objective of this measure is to continue organising the competition under the auspices of the MoE, with the aim of ensuring the promotion of innovation activities, raising public awareness of innovation-related activities, and appreciating innovating entities. The measure is a follow-up to a measure implemented under the 2008-2010 Innovation Policy. In this period, three annual competitions for the prize of the Minister of Economy of the Slovak Republic entitled “Innovative Action of the Year” were successfully organised.

**Task No. 1: To organise the “Innovative Action of the Year” competition**

Deadline: annually

Competent body: MoE

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 2.1: Support to communication tools aimed at the promotion of innovativeness

Estimated amount of funds to be spent on this measure (2011–2013): EUR 0.1 million

For 2011 the funds are provided from the MoE budgetary chapter.

**Measure No. 4: Strategic Innovation Material for the Next Planning Period**

The objective of this measure is to draw up a series of analytical materials describing the Slovak economy. Development studies will be prepared under this measure in order to show global trends and prospects of the Slovak Republic in these macro tendencies.

Under this measure, an institutional arrangement of the innovation system in Slovakia will be defined, including the system’s possibilities and needs, in order to be better prepared to face the challenges of the global economy in the 21<sup>st</sup> century.

In-depth studies to be drawn up under this measure will serve as a basis for the preparation of strategic materials for the next planning period.

**Task No. 1: To prepare analytical and strategic materials**

Deadline: 31. 12. 2013

Competent body: MoE in cooperation with the business sector and experts

Links to the Innovation Strategy of the Slovak Republic for 2007-2013:

Measure 1.3: Creating high-quality legislation for the development, support and evaluation of innovations

Measure 1.4 Introduction of regular evaluation through indicators of innovative environment development

Estimated amount of funds to be spent on this measure (2011-2013): EUR 0.05 million

**Measure No. 5: Support to projects applying for funding from Community Programmes to support innovation**

The measure is designed to better encourage Slovak businesses to increase their participation in Community Programmes, the current level of which is extremely low. A system of incentive instruments will be designed under the measure in order to encourage businesses to increase their participation in selected calls. This measure creates conditions to raise external funding by innovative companies.

**Task No. 1: To design a system for the provision of support to projects applying for funding from Community Programmes to support innovation**

Deadline: 30. 9. 2011

Competent body: MoE (SIEA)

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.2: Support of common services for entrepreneurs

Estimated amount of funds to be spent on this measure (2011-2013): EUR 0.4 million

**Priority No. 2. High-quality human resources**

**Measure No. 6: Innovation education for small and medium-sized enterprises**

The objective of this measure is to provide education and training to firms and entrepreneurs in the area of innovation activities. The reason for the adoption of this measure is a low level of innovation activities and creativity of businesses, with small and medium-sized enterprises falling within the category of low innovative organisations, in particular.

A series of special training courses on innovative activities and special practices and procedures will be organised under this measure. Educational activities will be carried out in cooperation with cluster organisations, industrial chambers and associations operating in Slovakia, as well as with higher territorial units and municipalities.

**Task No. 1: To organise educational events**

Deadline: until 31. 12. 2013

Competent body: MoE (SIEA)

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 2.1: Support to communication tools aimed at the promotion of innovativeness

Measure 2.2: Supporting the increase of human capital quality through the financing of educational activities, mobility and knowledge transfer

Measure 3.3: Support of innovation activities in enterprises

Estimated amount of funds to be spent on this measure (2011–2013): EUR 0.4 million

### **Measure No. 7: Lifelong learning and counselling system**

With respect to lifelong learning, the Ministry of Education, Science, Research and Sport of the Slovak Republic has defined a strategic objective to introduce an effective, ethic-based system of further training and career counselling, facilitating citizens' access to flexible possibilities to extend and deepen their qualification in order to improve their chances on the labour market, and encouraging their personality development and a better quality of life. The measure is a follow-up to a measure implemented under the 2008-2010 Innovation Policy.

The objective of this measure is to satisfy the real needs of citizens, employers, employees, public administration and educational institutions, and facilitate access to education, new qualifications and employment throughout the entire active life of citizens, with a particular focus on green jobs, gender equality and active ageing.

This strategic objective is reflected in the following aims:

- *An effective and ethic-based system of further training*
- *An accessible system of further training*
- *A flexible system for the recognition of the results of further training*
- *Effective career counselling and promotion of education*

#### **Task No. 1: To continue in the preparation of a lifelong learning and lifelong counselling system as defined in Slovak government resolution No. 382/2007**

Deadline: 31. 3. 2011

Competent body: MoESRS

Cooperation: pursuant to point B.11 and B.12 of government resolution No. 382/2007, the Ministry of Labour, Social Affairs and Family and the Ministry of Health of the Slovak Republic should cooperate in:

- the preparation of a legislative framework for the system of lifelong counselling;
- the implementation of financial support instruments for the development of lifelong learning and the creation and introduction of an effective system to finance lifelong counselling in Slovakia.

#### **Task No. 2: To carry out a PIAAC\* project and identify the level of key competencies of citizens**

Deadline: 2011 - 2013

Competent body: MoESRS

\*PIAAC - Programme for the International Assessment of Adult Competencies.

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:



Measure 2.2: Supporting the increase of human capital quality through the financing of educational activities, mobility and knowledge transfer

**Measure No. 8: Secondary vocational education**

The objective of this measure is to ensure qualified and skilled labour necessary to enhance competitiveness of the Slovak economy, with a particular emphasis on the development of small and medium-sized businesses and major investments in Slovakia; i.e., ensuring a sufficient number, structure and quality of secondary vocational school graduates to meet the demands on the labour market.

This measure is a follow-up to a measure included in the 2008-2010 Innovation Policy under which Act No. 184/2009 Coll. on vocational education and training was prepared and approved in order to adopt secondary vocational schools to the demands of the labour market. *The said Act governs relations between secondary vocational schools and employers and creates conditions for business entities to enter the process of vocational education and training.* The Act included the Ministry of Economy of the Slovak Republic, as a central government authority, among entities coordinating vocational education and training at the nation-wide level.

In order to remove shortcomings which have been identified since the effective date of the Act on Vocational Education and Training, and in connection with the fulfilment of the Manifesto of the Government of the Slovak Republic for the period of 2010-2014, conceptual proposals will be drafted, taking into account lessons learned from the application of the said Act in practice, which will translate into concrete proposals for amendments to be made to the Act on Vocational Education and Training.

Under this measure, a Sectoral Concept for Vocational Education and Training of Students for the Performance of Occupation and Professional Activities for the MoE will be prepared; the concept will focus on identifying promising industries in which an increase in strategic investments is anticipated and, hence, an increased demand for a large pool of qualified labour. The concept will also define a requirement to optimise the educational policy and improve the quality of labour market supply through vocational education and training properly targeted at the development of key competencies, including business knowledge and skills.

**Task No. 1: To amend the Act on Vocational Education and Training**

Deadline: 2012

Competent body: MoESRS

**Task No. 2: To draw up a Sectoral Concept for Vocational Education and Training of Students for the Performance of Occupation and Professional Activities for the MoE**

Deadline: 31. 12. 2013

Competent body: MoE in cooperation with MoESRS and expert public

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 2.2: Supporting the increase of human capital quality through the financing of educational activities, mobility and knowledge transfer

Indicative amount of funds to be spent on this measure (2011–2013): EUR 0.05 million

**Priority No. 3. Efficient tools for innovation**

**Measure No. 9: National incentive project to enhance Slovakia's innovation**

The lack of funds combined with the lack of innovation incentives are major problems in Slovakia. Since the country is lacking both public and private resources to fund innovation, it is necessary to raise the necessary funds abroad - from major companies and foreign and international institutions. Such companies and institutions will only be willing to invest in innovation in Slovakia if we manage to convince or encourage them properly. The lack of incentives to encourage innovation and transfer of R&D results into practice is clearly visible both in the academic and business sectors. For as long as innovation and research do not become a regular line of business, or its inherent part, and if the business is not closely associated with innovation, the existing situation in this field cannot improve in Slovakia.

**The key task** for the Ministry of Economy of the Slovak Republic will be to increase motivation of all relevant stakeholders. The existing innovation support instruments are insufficient, with a low volume of funds, and their effectiveness and efficiency is rather questionable (a clear measurement model is missing). Another important task for the Ministry of Economy of the Slovak Republic is to propose, in cooperation with other stakeholders, a system of modern support instruments to enhance innovation activities, including in industries and sectors that do not fall under the authority of the Ministry of Economy.

**Task No. 1: To prepare an audit and an innovation support system in Slovakia**

Deadline: 31. 06. 2011

Competent body: MoE

Cooperation: MoFA

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Estimated amount of funds to be spent on this measure (2011–2013): EUR 0.25 million

**Task No. 2: To prepare a National Project to enhance Slovakia's innovation performance**

Deadline: 31. 12. 2012

Competent body: MoE in cooperation with relevant stakeholders

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Estimated amount of funds to be spent on this measure (2011–2013): EUR 0.98 million

**Task No. 3: Proposal and implementation of modern support instruments for growth of Slovakia's innovation performance**

Deadline: 31. 12. 2012

Competent body: MoE in cooperation with relevant stakeholders

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Estimated amount of funds to be spent on this measure (2011–2013): EUR 18.52 million

**Measure No. 10: Operational Programme Competitiveness and Economic Growth,  
Measure 1.3. - Support of innovation activities in enterprises**

The purpose of the measure is to increase the competitiveness of industry through supporting R&D based innovation activities by businesses, by supporting the introduction of new innovation technologies (not their purchase), procedures, or products. The measure is a follow-up to a measure implemented under the 2008-2010 Innovation Policy.

The measure is financed from EU Structural Funds under the Operational Programme Competitiveness and Economic Growth.

**Task No. 1: Publication of calls**

Deadline: as defined in the Plan of Calls for the OP C&EG

Competent body: MoE

**Task No. 2: Submission of applications: until 2013**

Implementation of projects: throughout 2011-2015

Competent bodies: beneficiaries

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Indicative amount of funds to be spent on this measure (2011–2013): EUR 3.8 million

**Measure No. 11: Financial engineering instruments - innovation funding support  
and support to increase public spending on innovation**

The purpose of this measure is to mobilise financial resources in the area of innovation support in order to ensure that innovation activities performed by business entities receive the same level of funding as those in advanced EU countries. In connection with efforts towards the most effective use of allocated financial resources, an indirect state aid may be provided to profit-generating projects implemented by SMEs, i.e., financial engineering instruments such as guarantee funds, credit funds, venture capital funds and municipal development funds.

A new limited liability company, Slovenský záručný a rozvojový fond, s. r. o. (Slovak Guarantee and Development Fund), was established in 2009. The company, together with the European Investment Fund, runs a holding fund by means of which financial engineering instruments will be implemented in Slovakia under the JEREMIE initiative. The measure is a follow-up to a measure implemented under the 2008-2010 Innovation Policy.

The goal of the JEREMIE initiative and of the repayable financial aid provided in the form of innovative financial instruments is to support small and medium-sized enterprises (SMEs). It is estimated that financial support in the form of bank guarantees, indirect loans and venture capital may be provided to some 400-600 entities. These entities should primarily include small innovative companies with strong growth prospects which have problems to fund their expansion and innovation activities.

The measure is financed from EU Structural Funds under the Operational Programme Competitiveness and Economic Growth (OP C&EG).

**Task No. 1: To ensure funding of innovation activities by business entities from the JEREMIE fund**

Deadline: 31. 12. 2013

Competent body: MoE, MoF

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Estimated amount of funds to be spent on this measure (2010–2013): EUR 67.0 million

**Measure No. 12: Innovation vouchers**

The measure represents a simple financial support instrument to ensure a direct link between businesses (SMEs in particular) and universities and research and development facilities. Vouchers are actually “non-cash cheques” provided directly to a business entity, entitling it to purchase a certain portion of services from an eligible research and development organisation under the “Innovation Vouchers - de minimis scheme” The measure is a follow-up to a measure implemented under the 2008-2010 Innovation Policy.

**Task No. 1: Implementation of the measure**

Deadline: 31. 12. 2013

Competent body: MoE

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises

Indicative amount of funds to be spent on this measure (2011–2013): EUR 0.3 million

**Measure No. 13: Intellectual property protection**

One of the basic innovation instruments is an effective intellectual property protection system which needs to be utilised more consistently within the already existing framework and instruments of the Industrial Property Office of the Slovak Republic. To that end, increased attention needs to be given to the enforcement of individual intellectual property rights. The purpose of the measure is to create, within a prepared concept for the development of new inter-sectoral instruments in the area of enforcement of intellectual property rights, a system for administrative cooperation of national institutions of the Slovak Republic to combat counterfeiting and copyright piracy.

**Task No. 1: To prepare a system for administrative cooperation of national institutions of the Slovak Republic to combat counterfeiting and copyright piracy.**

Deadline: 31. 12. 2011

Competent body: The Industrial Property Office, MoE

Links to the Innovation Strategy of the Slovak Republic for 2007–2013:

Measure 3.3: Support of innovation activities in enterprises